

funicle subequal, the first slightly longer; joints of club fused, the apex produced into a spine-like process; propodeum punctured, lateral folds represented only by basal foveæ; mesepimeron with a depressed area with thimble-like punctures, above this a single fovea and one below; below insertion of wings a double fovea; rest of mesopleuræ almost unsculptured; coxæ metallic bluish, femora brown, rest of legs, including trochanters, honey-color; abdomen yellowish, the sides more or less dark brown.

Male.—Length about 2 mm.; flagellum of antennæ over 1 mm. Similar to the female but more purplish; legs brown, abdomen dark brown; antennæ elongate, dark brown, the funicle seven-jointed, the first joint two-thirds as long as the scape; apical spur on club as in female; mesopleuræ and metapleuræ mostly punctured.

One of each sex reared from *Mordellistena ustulata* by W. J. Phillips, Bureau of Entomology, U. S. Department of Agriculture; the female from Lafayette, Indiana (under Webster No. 5181), and the male from Wilmington, Ohio (under Webster No. 6332).

Type: Cat. No. 13368, U. S. National Museum.

NEW SOUTH AMERICAN NEUROPTEROID INSECTS.

BY NATHAN BANKS.

During the past two years I have received a considerable number of these insects from Colombia, collected by Mr. A. H. Fassl in the western part of that country. Dr. Esben Petersen, of Silkeborg, Denmark, has kindly sent me duplicates from the Jensen-Haarup expedition to Argentina. The material in these two lots, and a few others, form the basis of the following descriptions. The altitudes of the localities in Colombia are in meters, as on the labels sent with the specimens.

Family MYRMELEONIDÆ.

Brachynemurus argentinus, new species.

Face pale yellowish, vertex pale brown, rather dark in front, not definitely marked; antennæ pale brownish, tips darker; pronotum pale yellowish, with a pale brown stripe each side, leaving a narrow median line; thorax pale yellowish, anterior lobe with two dark spots behind, larger spot over base of each wing and on the pleura, a double dark spot on each scutellum; abdomen pale on basal part, dark or black toward tip, all densely white-haired; legs very pale yellowish, tips of last tarsal joint black, rest unmarked, spurs longer than basal two joints together. Wings hyaline, venation yellowish, longitudinal veins interrupted with black spots and a small cloud at end of each cross-vein in the fore wings, the median vein in both pairs pale, almost unmarked, a larger spot

where cubitus and median connect near tip of the wing, and the stigma rather darker. Wings rather broad, hardly acute at tips; three cross-veins before radial sector in fore wings, two in hind wings, about eight branches to radial sector in each wing; in fore wings the anal vein runs parallel to the cubital branch for about four cells, in the hind wings not for one cell; abdomen of female as long as fore wings, of male much longer and more slender, the appendages very long, longer than any segment of the abdomen, not much curved.

Expanse, 38 to 45 mm.

From Mendoza, Argentina (Jensen-Haarup Expedition, through Dr. Petersen.)

***Psammoleon punctipennis*, new species.**

Head pale, a broad black band below antennæ, and one above the sockets; two black bands on vertex, the anterior band formed of three spots, the middle spot longitudinal, the lateral transverse; antennæ dark brown, each joint tipped with yellowish; pronotum dull black, a lateral and a median yellow stripe, latter narrow, and both may be broken near middle; thorax black, with yellowish spot on each side of the anterior lobe, some on the lateral lobes, and on the scutellum a rather large apical spot; abdomen black, apex and middle above of basal segment pale, sides of last dorsal segment pale, also tip of last ventral segment; legs pale, I and II heavily dotted with black on outer sides, and larger spot at tips of femora above, III less dotted; tarsal joints III and IV black; legs slender, spurs as long as two tarsal joints, fifth joint longer than first; pronotum about as broad as long, abdomen rather short. Wings hyaline; fore wings with four small black spots; one slightly before the middle on hind margin, and three close together toward apex near hind margin, two of them almost on the margin, also two fainter dots near apex of wings; stigma with basal black dot; hind wings with one black spot on hind margin toward tip, and very faintly one or two dots beyond it. Venation mostly brown, the subcosta, radius, and cubitus spotted pale. Wings rather long and narrow, acute at tips; twelve cross-veins before radial sector in fore wings, one in hind wings, about twelve branches to radial sector in fore wings, and the anal unites with cubital branch just above the margin; all costal cross-veins simple.

Expanse, 78 mm.

From San Antonio, Colombia (Fassl). One specimen is not fully colored and does not show the spots.

***Myrmeleon argentina*, new species.**

Face yellow, a broad black band under and between antennæ, latter wide apart, nearly twice the diameter of a socket; head above antennæ dull black, with a yellowish spot near eye, and a submedian stripe sometimes connected to the spot; antennæ dark, paler near tip; pronotum dark, anterior corners and lower margin paler, two pale spots each side, rather large; thorax dull black, posterior margin of meso- and meta-thorax nar-

rowly pale; abdomen dull black, last few segments pale at tips, last segment with a pale spot each side, legs pale, femora mostly black, except base and tip, tibia I black on outer side, tibia III black beneath, tarsi blackish on tips of joints, spurs not as long as basal joint. Wings hyaline, venation interruptedly black and white, the cubitus of hind wings mostly black, stigma indistinct, pale. Wings slender, subfalcate at tips; seven cross-veins before radial sector in the fore wings, five before radial sector in hind wings; about ten branches to radial sector in each wing; in both pairs the anal runs parallel to fork of cubitus only a very short distance.

Expanse, 50 to 52 mm.

From Mendoza, Argentina (Jensen-Haarup Expedition, Dr. Esben Petersen, of Silkeborg, Denmark).

***Austroleon frontalis*, new species.**

Face yellow; a black band above and one below antennæ; vertex brown, rather paler each side behind; basal joint of antennæ with brown band below, rest of antennæ brown; pronotum dark brown, with narrow median pale line, broadened in the middle, and in front a round pale spot each side, a pale spot or streak on each posterior side; rest of thorax dark brown, with pale spots; two on anterior lobe, two larger behind these, a small one over base of each wing, two on mesoscutellum, two on metathorax, and two on metascutellum. Abdomen brown, faintly paler at tips, and a spot on middle of the seventh segment above. Legs pale, banded with black on the tibiæ; second, third, and fourth and apical part of fifth tarsal joints black; femora I brown, II and III banded before tip. Wings hyaline, the veins black and white spotted, median vein all black; the black on other veins more than white, many of the cross-veins with median white dot; a small dark cloud at end of anal vein in the fore wings, also one under stigma, and an oblique one behind this near the hind border; stigma in both wings white, black at base. Wings rather slender, subfalcate at tips; three cross-veins before radial sector in the fore-wings, two in the hind wings; anal ends below first fork of radial sector, radial sector with six branches in fore wings, five in hind wings; all costal cross-veins simple. Abdomen of female short; of male long and slender, with appendages nearly twice as long as the last segment (nearly as long as width of the hind wings).

Expanse, 30 to 32 mm.

From Mendoza, Argentina (Jensen-Haarup Expedition, through Dr. Petersen).

***Austroleon dorsalis*, new species.**

Face pale, only a very small dark mark under the antennal sockets, a brown band above antennæ from eye to eye, a broader band across vertex, longitudinally striated and divided in the middle by a furrow; basal joint of antennæ with a brown band below; pronotum pale, a brown stripe each side, and a shorter median one, the lateral stripes in front curve toward each other and back toward the median stripe; two dark

stripes on the anterior lobe of thorax, a dark stripe above wings, and middle of scutelli dark, the middle lobe of metathorax dark, with a pale median spot; abdomen mostly dark, basal joint with yellow spot each side, the other segments with faint yellow side line; legs pale; third, fourth and fifth tarsal joints tipped with black; tibia I with outer brown stripe, tibia II with two dark marks above, all femora rather darker above. Wings hyaline, venation interruptedly black and white; radial sector mostly black, and the cubitus more black than white: a dark spot near stigma, an oblique spot near end where cubitus and median connect, several narrow clouds along the cubitus, an oblique one at the end of the anal vein, and many of the marginal forks with small brown clouds; hind wings scarcely marked at all. Wings moderately narrow, three cross-veins before radial sector in fore wing, two in hind wing, about seven branches to radial sector in each wing, both pairs acute at tips; abdomen no longer than the fore wings.

Expanse, 38 to 40 mm.

From Mendoza, Argentina (Jensen-Haarup Expedition, through Dr. Petersen).

***Austroleon verticalis*, new species.**

Face yellow, antennal sockets margined on inner side below with brown, a brown mark above the antennæ, a transverse spot each side on upper front near eye, a pair of submedian dots and two longitudinal median brown spots on vertex; antennæ short, brown, basal joint with brown mark below. Pronotum yellowish, a brown stripe each side, with a spot in front of it, and a shorter median stripe in posterior part; thorax with two brown spots on the anterior lobe, a median brown stripe on the scutelli, a stripe over each wing brown; abdomen pale, with median and lateral brown stripes; legs pale, tip of fifth tarsal joint black, rest but little marked. Wings hyaline, venation interruptedly brown and white, the median vein in both wings and many cross-veins wholly dark; a dark spot near stigma, and one where median and cubitus unite near tip of wing. Wings moderately slender; three cross-veins before radial sector in the fore wing, two in the hind wing; radial sector with five or six branches in both wings; fore wings hardly acute at tip, rather broad there.

Expanse, 35 mm.

From Mendoza, Argentina (Jensen-Haarup Expedition, through Dr. Petersen).

Family CHRYSOPIDÆ.

Of the genus *Allochrysa* six species are before me that may be tabulated as follows:

- | | |
|---|---|
| 1. Distinct spots on wings other than stigma; inner gradate series extends basally..... | 2 |
| No distinct spot on wings; inner gradate series not extended basally..... | 4 |

2. A large spot near origin of radial sector, and one near tip of wing, many smaller spots; third cubital cell very narrow.

maculipennis

Only a spot at connecting veinlet between median and cubitus in forewings

3

3. The upper part of the third cubital cell reaches nearly one-half way back on the second cell..... *pretiosa*

The upper part of the third cubital cell reaches only a little back on the second..... *colombia*

4. Veinlets between radius and radial sector green, a small cloud on the fourth veinlet from end of anal vein; small species.

inornata

Veinlets between radius and sector partly black..... 5

5. Gradate veinlets faintly clouded, inner gradate series irregular..... *pulchella*

Gradates not clouded, inner series regular..... *cordillera*

***Allochrysa colombia*, new species.**

In general similar to *A. varia* Schn., but lacks the black on basal costal cross-veins and divisory veinlet, the outer gradate series is not heavily marked, but at its base is a distinct dark cloud; the stigma is dark at base; the black near tip of abdomen is in one large spot (not broken up). The head shows a transverse blackish mark over the base of the antennæ, on the basal joint is a red stripe, and the thorax is more heavily marked with black than in *A. varia*; the pronotum has a reddish mark at each anterior corner. The inner gradate series is much more produced basally than in *A. varia*, often with 15 or 20 veinlets.

From Cañon del Monte Tolima, 1,700 meters, October, San Antonio, 1,800 meters, November; and Santa Margarita, July, 2,700 meters; all Colombia (Fassl).

***Allochrysa pretiosa*, new species.**

Very similar to *A. colombia*, but differs in that the inner series of gradate veinlets does not extend so far basally, hardly further than in *A. varia*, being about ten or eleven veinlets, and in the shape of the third cubital cell. The upper part extends backward over the second cubital for nearly one-half the length of that cell, so the divisory veinlet appears as a fork of the median. The line over base of antennæ is more narrow than in *A. colombia*, and the cloud at base of the inner series of gradate veinlets is not nearly as prominent.

From Inmba, Cauca, 1,000 meters, January (Fassl).

***Allochrysa maculipennis*, new species.**

Mouth blackish, a reddish mark on cheeks; basal joint of antennæ mostly black above, leaving a pale triangle, second joint dark, and several other joints following marked with black; pronotum with two reddish or blackish spots each side, one at anterior outer corner; tho-

rax with dark subbasal band, a spot over base of fore-wings, and the metascutellum dark; several of the abdominal segments near tip with a black spot above; legs very pale; wings hyaline; forewings black at extreme base, a large black cloud over the first connecting veinlet from radial sector to median and up over the origin of the radial sector, a smaller cloud on end of anal vein and on the connecting veinlet to cubitus, a black cloud on last two gradates of the outer series, another on the normal base of the inner series (but inner series is extended basally, and some faint clouds near anal angle of wings, several other smaller clouds, especially on the cross-veins between cubitus and median; the stigma in both pairs with basal black spot; hind wings otherwise unmarked. The venation is peculiar, the inner gradate series extends basally even before the origin of the radial sector, and there is a partial longitudinal vein between the radius and radial sector; all cubital cells very narrow, the third over three times as long as broad, the divisory veinlet parallel to sides; the costal area is not unusually broad; fore wings rather broad, not acute at tip, hind wings much more slender, acute at tips.

Expanse, 45 mm.

From Cañon del Tolima, Colombia, 1,700 meters, October, and Anancabamba, Northern Peru, 1,800 meters (Fassl).

***Allochrysa cordillera*, new species.**

Greenish, two red stripes on vertex, conjoined in front, sides of pronotum with red stripe, thorax large, green; abdomen short and large, dark; legs pale. Wings hyaline, venation green, gradate veinlets black, origin of radial sector black, cross-veins between radius and radial sector black in the middle, also those between cubitus and anal; stigma scarcely darker. Wings large and long, but scarcely acute; second cubital shorter than third, lower cell of third lengthened at lower tip; about seven cross-veins between radial sector and median, and about twelve branches beyond; about eleven gradate veinlets in each series, both much oblique; in hind wings the radial sector unites with median for a cell-length.

Expanse, 44 mm.

From Innbatas, Rio Dagna, Colombia, August.

***Allochrysa inornata*, new species.**

Pale yellowish or greenish; a reddish mark on each cheek, a red mark on vertex near eye; antennæ pale; pronotum with a red stripe each side; thorax pale in middle, green near base of wings; abdomen green; legs paler. Wings hyaline, venation green, the gradate series black and origin of radial sector and ends of some cross-veins between radial sector and radius black, a cloud on the fourth veinlet from end of the anal near hind margin, stigma not very distinct, five cross-veins between radial sector and median, and seven branches beyond, eight veinlets in outer gradate series, and four in the inner, latter but

little oblique; second cubital about as long as third, lower cell of third broader and lengthened at lower tip. Wings short and broad; fore wings not acute, the subcosta and radius very sinuous before middle; hind wings slender, acute at tip; the radial sector unites with median for a cell length.

Expanse, 27 mm.

From Innbatas, Rio Dagna, 400 meters, Colombia, August.

Allochrysa pulchella, new species.

Face pale; cheeks red, tips of palpi black, a red spot on vertex each side at eye; antennæ pale; pronotum pale, unmarked; abdomen darker, legs pale. Wings hyaline, venation greenish, the gradate veinlets black, cross-veins between radius and radial sector black at upper ends, origin of radial sector also black, and forks of some of the outer veins; these blackened veins all faintly margined with brown clouds, also one or two clouds on branches of cubitus near hind margin, stigma rather dark; hind wings all pale. Pronotum longer than broad, narrowed in front. Wings long, acute at tips, second cubital cell shorter than third, divisory veinlet not much oblique, but the lower cell is lengthened at the lower outer corner; five cross-veins between radial sector and median, and seven branches beyond; about eight gradates in outer series, and about six in inner series, the latter irregular.

Expanse, 35 mm.

From Para, Brazil (Baker).

Chrysopa gloriosa, new species.

Face pale, a dark spot under each antenna, and one above each socket; a broad curved purplish stripe on upper side of basal joint of antennæ, second joint black, beyond pale; vertex and pronotum bright green, latter with purplish spot at anterior corners; thorax green above, pale on pleura, a dark stripe in front of the fore wings, abdomen pale greenish, with black spot above on fourth, sixth and seventh segments; legs pale; wings hyaline, fore wings very distinctly black at bases, a black cloud at the base of the radial sector, at last connecting veinlet between the median and cubitus, and on stigma; smaller clouds on many cross-veinlets, especially on those between radius and radial sector, venation green, gradate veins black, and dots at forks of outer marginal veins. In hind wings all green, except the first connecting veinlet between radius and radial sector, which is black, and a black spot at stigma, and at extreme tip of wing. Basal joints of antennæ very large, but antennæ not very long; pronotum broader than long. Fore wings rather broad, hind wings rather slender, and acute at tips; second cubital cell much shorter than the third, divisory veinlet but little curved and ending beyond the cross-vein, five cross-veins from radial sector to median in fore-wings, four in the hind wings, and about eight branches of radial sector beyond; in hind wings the radial sector unites with the median for less than a cell-length.

Expanse, 35 mm.

From Cañon del Tolima, Colombia, 1,700 meters, November (Fassl). It is the most handsome species of the genus known to me.

***Chrysopa albopalpis*, new species.**

Pale yellowish or greenish, a reddish mark on each cheek; palpi pale; antennæ pale, unmarked, not very long, a red mark each side on vertex near eyes; pronotum with a dark spot at outer anterior corner, about as long as broad, narrowed in front. Wings hyaline, venation greenish, many of the cross-veins and branches with small brown clouds, as in *Ch. nigripalpis*, also on the gradate veinlets of hind wings; the costals in fore wings black at each end, and some gradate veinlets, particularly of the outer series, dark. Wings moderately broad, acute at tips; the second cubital cell a little shorter than the third, divisory veinlet curved, ending a little beyond the cross-vein; five cross-veins between radial sector and median in fore wing, four in hind wing, seven branches beyond in both pairs; six or seven gradate veinlets in inner and eight or nine in the outer series; in hind wings the radial sector unites with median for nearly one cell-length.

Expanse, 26 to 28 mm.

From San Antonio, February, and Carmen, 1,600 meters, November, Colombia.

***Chrysopa caucana*, new species.**

Pale yellowish or greenish; a faint reddish mark under each eye, antennæ (except first and second joints) black, paler towards tip; pronotum a little longer than broad, hardly narrowed in front, a red stripe each side near margin; wings hyaline, venation green, the costal cross-veins wholly black, the gradate series black, and the cross-veins connecting radial sector to radius black in the middle; in the hind wings the venation is all greenish; stigma barely distinct. Wings not very long, hardly acute at tips; second cubital cell as long as the third, divisory veinlet ends much beyond the cross-vein; five cross-veins from radial sector to median in fore wing, about seven branches of radial sector beyond; about six veinlets in inner gradate series and seven to nine in outer series; in hind wings the radial sector unites to median for a cell-length.

Expanse, 33 mm.

From Inmba, Cauca, Colombia, 1,000 meters, January (Fassl).

***Chrysopa nigripalpis*, new species.**

Yellowish or greenish, a bright red mark on each cheek, and vertex with spot near eyes; palpi jet black; basal joint of antennæ with red line outside; rest of body and legs unmarked. Antennæ very long, basal joint large; pronotum about as broad as long. Wings hyaline; venation greenish, the gradate veinlets margined with faint brown clouds, and many other cross-veins and branches with brown cloud at

one end, none of the veinlets black; in hind wings the gradate veinlets are more narrowly marked. Wings rather broad, acute at tips; second cubital cell much shorter than the third, divisory veinlet straight, ending much before the cross-vein, four cross-veins between radial sector and median and seven branches of radial sector beyond, in both pairs; about five of six gradate veinlets in each series, the inner series very irregular in position; in hind wings the radial sector unites with median for less than a cell-length.

Expanse, 35 mm.

From San Antonio, Colombia, 1,800 meters, February (Fassl).

***Chrysopa lanata*, new species.**

Wholly pale greenish yellow, with some reddish on cheeks, and sometimes a faint reddish mark above near eye, and a pale median stripe on pronotum and thorax; legs pale; wings hyaline, venation greenish, unmarked; stigma moderately distinct. Pronotum but little broader than long, narrowed in front. Wings long, slender, strongly acute at tips of both pairs; second cubital cell no longer than the third, the divisory veinlet ending far before the cross-vein, yet the small cell is about three times as long as broad; five cross-veins between radial sector and median, and about seven branches of the radial sector beyond; about six or seven cross-veins in inner gradate series, and about eight in the outer series in fore wings; usually two or three branches of cubitus are forked before margin.

Expanse, 23 to 25 mm.

From Mendoza, Argentina (Jensen-Haarup Expedition, through Dr. Petersen).

***Eremochrysa argentina*, new species.**

Face long, pale; a black spot on each cheek under the eye; two narrow dark lines on vertex, conjoined in front between the antennæ, second joint in antennæ dark, basal joint with a black line on the outside, basal part of the antennæ dark, tips of palpi dark, pronotum dark green, unmarked (except dot on anterior corner seen from side) much broader than long; thorax and abdomen paler green; legs pale yellowish. Wings hyaline, venation greenish, with minute dark dots at base of each bristle; stigma narrow, distinct. Wings short and broad, rounded at tips; the second cubital cell is very much longer than the third; the divisory veinlet ends much beyond the cross-vein; five or six cross-veins between radial sector and the median, only three or four branches of radial sector beyond; in fore wing the radius runs down parallel to tip and apparently not into the margin; only one or two gradate veinlets in any wing; all cells large and subquadrate.

Expanse, 16 to 18 mm.

From Mendoza, Argentina (Jensen-Haarup Expedition, through Dr. Esben Petersen).

***Leucochrysa caucella*, new species.**

Greenish, a reddish mark on each cheek, tips of palpi black, basal joint of antennæ reddish above, and at base of sockets above is a dark spot; pronotum with a red stripe near each side margin; thorax green; abdomen greenish or brownish. Wings hyaline, venation green, gradates and cubital cross-veins black at ends, radial sector black at origin, not black beyond; hind wings with greenish venation, the gradate series dark, and costals sometimes partly dark; stigma in both pairs dark and prominent. Fore wings rounded at tip, six cross veins from radial sector to median, and seven branches beyond; second cubital cell shorter than the third, the divisory veinlet starting from near the median; about six veinlets in the inner gradate series, and about seven in the outer row; hind wings slender, acute at tips.

Expanse, 30 mm.

From Inmba, Cauca, 1,000 meters, January; San Antonio, 1,800 meters, January; and Cañon del Monte Tolima, 1,700 meters, October; Colombia.

***Leucochrysa neuralis*, new species.**

Pale yellowish; basal joints of antennæ large, reddish above, a broad transverse red mark above antennæ, one on anterior corner of pronotum, and a large transverse red spot each side near middle, several spots on each side of thorax above; abdomen slightly marked with black toward tip. Wings hyaline; venation pale, the gradate veinlets and the cubital cross-veins wholly black, many other cross-veins largely black at ends, radial sector black at origin and also near middle, stigma not very distinct; hind wings pale greenish, venation pale, the gradates dark. Fore wings rather long, hardly acute at tip; six cross-veins from radial sector to median, and nine branches beyond; nine veinlets in the inner gradate series and ten in outer series; second cubital shorter than the third, divisory veinlet straight and very oblique, cutting off only a very small cell and ending beyond the cross-vein. Hind wings slender, acute at tips; seven veinlets in inner gradate series, nine in the outer row.

Expanse, 40 mm.

From San Antonio, January, 1,800 meters, Colombia (Fassl.)

***Leucochrysa montanola*, new species.**

Greenish or yellowish; a dark spot on each cheek; tips of palpi black; basal joint of antennæ with a red-brown stripe on outer side, second joint dark red-brown; pronotum with a narrow black margin; thorax and legs pale greenish. Abdomen rather darker near tip. Wings hyaline, venation green, gradates and cubital cross-veins black, and most of the other cross-veins and branches of the cubitus black in part; radial sector black at base, and also beyond the middle before stigma; hind wings with pale venation, gradates pale greenish; stigma in both

pairs dark and prominent. Fore wings rounded at tip; six cross-veins from radial sector to median, nine branches beyond; about eight veinlets in each gradate series; the second cubital cell much shorter than the third; the divisory veinlet cuts off a large cell; hind wings slender, acute at tips.

Expanse, 33 mm.

From Cañon del Monte Tolima, Colombia, 1,700 meters, December (Fassl).

Family HEMEROBIIDÆ.

Micromus falcatus, new species.

Head pale, antennæ pale brownish; pronotum, thorax, and abdomen brown; legs pale, banded with dark; femora I with three bands, femora II and III with two, one near middle, one near tip; all tibiæ with two bands, one near base, other near tip; in I and II the basal band is very broad; tarsi dark at tip. Wings rather dark brown, especially in the anal area; venation pale, marked with brown much as in *M. dispar*, but more prominent dark spot beneath tip of stigma and on the end of the anal vein; outer gradates narrowly edged with hyaline, other gradates hyaline in middle. Hind wings brownish, darker at tip, pale venation, outer gradates black. Fore wings slender, distinctly subfalcate at tip, five radial sectors, outer one forked three times before outer gradate series, three gradate series, five in inner row, seven in middle row, widely separated one from the other, and about ten or eleven in the outer row. Hind wings with radial sector six or seven branched; eight veinlets in the inner gradate series and ten in the outer row.

Expanse, 25 mm.

From Monte Socorro, Colombia, 3,000 meters, July (Fassl).

Micromus dispar, new species.

Yellowish, a dark dot on each side of face, antennæ brownish; legs pale, front and middle pair with blackish bands near tip of femora, base and tip of tibiæ, and tip of tarsi; abdomen brown. Wings faintly brown, with pale venation, interrupted with brown dots, especially prominent on the radius, cubitus, outer gradate series, and each side of the stigma, margin with patches of dark veins, on hind margin far apart; most of the gradate veinlets have a white dot on the middle. Hind wings pale, venation pale, gradates dark, stigma slightly prominent. Fore wings long, tip rounded, five radial sectors, outer one forked three times before outer gradate series; three gradate series, five veinlets in the inner, six in the middle, and nine in outer series; hind wings with radial sector with six branches; two gradate series, seven in inner and nine in outer series.

Expanse, 25 mm.

From Monte Socorro, Colombia, 3,500 meters, July.

Megalomus marginatus, new species.

Pale yellowish; antennæ slender, longer than breadth of wings; hind tibia fusiform. Wings yellowish hyaline; venation yellowish, faintly interrupted with brown, margin with groups of dark dots separated by pale spaces, both gradate series margined with brown, the outer quite heavily; an oblique dark stripe from anal angle to end of inner gradate series; this stripe contains a narrow hyaline streak; base of stigma slightly marked, the veinlets here very numerous and close together; hind wings with the outer gradate series black, only three veinlets in the inner gradate series, the stigma yellowish. Fore wings two and a fourth times as long as broad, costal area moderately broad toward base, costal cross-veins numerous and once or twice forked; three veinlets between radius and subcosta in basal half of wing; radius with five or six branches, the outer two being close together at base, or even united; about seven gradate veinlets in inner series and ten in the outer series; the cross-veinlet between the first sector of radius and the median is fully twice its length out on the radial sector.

Expanse, 15 mm.

From Cañon del Monte Tolima, 1,700 meters; and San Antonio, 1,800 meters; Colombia, February (Fassl).

Boriomyia colombiensis, new species.

Pale yellowish brown; antennæ long, slender. Wings rather long and slender, acute at tips, faintly brownish, heavily marked with dark spots and clouds; venation mostly brown or black, sometimes interrupted, especially the radius, the subcosta pale; anterior margin of wing with groups of black veinlets separated by pale spots, on hind margin the dark patches and clear spots are both longer; there are dark clouds along the gradate series, and also near the outer and apical margins in patches; several darker spots or one large dark spot near end of anal vein, one on connecting veinlet from cubitus to anal; two other dark spots, one at forking of first and other at forking of second radial sector, the latter sometimes much larger and more prominent. Hind wings smoky, tip darker, costal area yellowish, outer gradates dark, and a dark spot on the lower end of the series.

Fore wings with the costal area rather narrow; four (sometimes five) radial sectors; three series of gradate veinlets, four to six in inner and middle series, six to eight in outer series; some of those of outer and middle series have a hyaline dot upon them. Hind wings with two series of gradate veinlets, about six in the inner and eight in outer series.

Expanse, 22 to 26 mm.

From San Antonio, Colombia, 2,000 meters, February, and Monte Socorro, 3,500 to 3,800 meters, Colombia, July.

Symphorobius modestus, new species.

Face pale, a dark mark on cheeks, one under each antenna, one between antennæ, and fainter ones on the clypeus, vertex brown, with pale median spot behind; antennæ slender, yellowish, faintly annulate; pronotum brown, with median pale stripe; thorax dark brown, with several pale spots; abdomen dark brown; legs pale yellowish, hind tibiæ much swollen beyond middle. Wings faintly brownish, darker apically and on the outer margin; venation brown, interruptedly pale, alternate pale and dark dots around margin, brown clouds on gradate veinlets, and on many cross-veins, and a large, rather triangular dark spot above the anal angle; hind wings faintly smoky, darker at tip, venation brown. Fore wings moderately long, fully two and three-fourths times as long as broad, two radial sectors, upper branch of the second is connected back to the radius twice, one cross-veinlet between first radial sector and the median, near base of median fork; two cross-veinlets from anal to cubitus; costal area rather narrow; in hind wings no gradate veinlets, only the two small cross-veinlets in disc of wing, the radial sector with three branches.

Expanse, 11 mm.

From Mendoza, Argentina (Jensen-Haarup Expedition).

Hemerobius tolimensis, new species.

Pale yellowish, a dark mark on each cheek; antennæ rather heavy; pronotum with a dark mark each side; abdomen brownish, legs pale yellow. Wings hyaline; venation pale, with brown dots, except the subcosta; outer and posterior margin of wing brown, margin with groups of brown dots alternating with pale spaces; stigma indistinct, from each dot on a vein extends an oblique cloud on each side of vein, and the gradates margined with brown. Hind wings pale, venation pale brownish, costal area yellowish. Fore wings rather long, almost acute at tips, costal area quite broad at base, three radial sectors, third forked but twice before stigma, and connected back to radius but once before stigma and once at the outer gradate series; veinlet connecting lower branch of median to cubitus dislocated from and shorter than the veinlet below it; five veinlets in the inner gradate series, last beyond preceding, about seven in the outer series. Hind wings with two branches to radial sector, and but few cross-veins, only the middle two of the inner gradate series, and about five or six in the outer series.

Expanse, 20 mm.

From Monte Tolima, Colombia, 3,200 meters, January, and Guincta, Quindini, Colombia, 3,500 meters (Fassl).

Hemerobius bolivari, new species.

Pale yellowish, a black mark on each cheek, and tips of palpi black; antennæ rather short. Wings hyaline; venation pale yellowish, interrupted with dark-brown dots at rather long intervals, from each dark dot there extends a brown streak obliquely out each side of the vein; gradate series brown, and costal cross-veins brown at bases, a black spot on the veinlet connecting lower branch of median to the cubitus, and a smaller one at forking of cubitus; hind wings hyaline venation pale. Fore wings slender, rounded at tip, costal area broad at base, three radial sectors, a connecting veinlet from median to radius long before origin of first radial sector; the connecting veinlet from the lower branch of median to cubitus is shorter than the veinlet below it; about six gradates in inner series and about seven in outer series; the lower of inner series before the preceding one; hind wings with only a few cross-veins.

Expanse, 16 mm.

From San Antonio, Colombia, 1,800 meters, February (Fassl).

Hemerobius albipennis, new species.

Head, antennæ, and thorax black, abdomen paler, legs very pale, wings whitish hyaline, with hyaline venation, wholly unmarked; palpi pale, with black tips. Antennæ rather long and slender; fore wings elongate, tip rounded, costal area rather narrow, three radial sectors, but the third is forked three times before stigma, and connected back to the radius only once before stigma, and once at the outer gradate series; the cross-veinlet from the lower branch of median to the cubitus is shorter than the veinlet below it; six veinlets in the inner gradate series, last two interstitial or the last beyond preceding, seven in outer series. Hind wings with few cross-veins.

Expanse, 16 mm.

From Paso del Quindini, Linca, Colombia, 3,800 meters. Distinct from all known species, by the contrasting colors of wings and body.

Family TRICHOPTERA.

Macronema fraterna, new species.

Closely related to *M. argentilineata* Ulmer, and lacks the first apical sector in the hind wings; the fore wings are dark as in that species, with the silvery line across in the stigmal region, but in this species this line is plainly broader on the costal end, the apex of the wing is also silvery for a short space, the inner margin of this space being convex (concave in *M. argentilineata*), and does not extend back along the outer margin; there is no pale spot between the transverse

line and the tip of wing, the basal costal region is also silvery. The hind wings are not as broad at base as in *M. argentilineata*; more like *M. lineata*.

Expanse, 18 mm.

From Guiana (Rolle).

***Leptocella pulchella*, new species.**

Pale whitish yellow; tips of antennal joints dark, and four black spots in fore wings before the anastomosis, forming a rhomboid, one of the spots on the hind margin, two black spots on the anastomosis, and two to five fainter spots beyond, sometimes forming a faint band; the outer fringe gray, that at anal angle longer and nearly black; hind wings wholly pale whitish, with long white fringe. Discal cell of fore wing swollen both above and below just before tip.

Expanse, 20 mm.

From Cañon del Monte Tolima, Colombia, 1,700 meters, December (Fassl).

***Polycentropus colombiensis*, new species.**

Head black, with fulvous or brownish hairs; antennæ yellowish; pronotal lobes with tawny hair; thorax dark; abdomen black above, brown below, legs pale yellow brown, basal joint of tarsus I darker. Wings dark brown or black, densely hairy, with many faint golden spots, not prominent, fringe dark; hind wings dusky, darker at tips, venation brown. Fore wings with the discal cell a trifle longer than its pedicel; first apical fork shorter than its pedicel, second fork reaching to end of discal cell, third and fourth forks an equal distance back, but not as far as the second; the fifth fork reaching nearly one-half way back of the discal cell, wide near base. Hind wings rather broad, no discal cell, both branches of radial sector forked, upper very shortly so, fourth fork large and its upper branch close to lower branch of the third fork.

Expanse, 20 mm.

From Cañon del Monte Tolima, 1,700 meters, Colombia, January 10.